

**PROPOSED**

[Issuance Date]

**CERTIFIED MAIL**  
**RETURN RECEIPT REQUESTED**

05-xxxE CAB  
File No. 0097-01

Mr. Alton Miyamoto  
President and Chief Executive Officer  
Kauai Island Utility Cooperative  
4463 Pahee Street  
Lihue, Hawaii 96766-2032

Dear Mr. Miyamoto:

**Subject: Covered Source Permit (CSP) No. 0097-01-C**  
**Application for Renewal No. 0097-03**  
**Kauai Island Utility Cooperative**  
**Port Allen Generating Station**  
**Located at: 261 Akaula Street, Eleele, Kauai**  
**Date of Expiration: [Five Year Period from Issuance Date]**

The subject Covered Source Permit is issued in accordance with Hawaii Administrative Rules, Title 11, Chapter 60.1. This permit is a renewal for the existing Port Allen Generating Station. The issuance of this permit is based on the plans, specifications, and information submitted as part of your renewal application dated July 27, 2004 and additional information dated June 21, 2005. A receipt for the application filing fee of \$3,000.00 is enclosed.

The Covered Source Permit is issued subject to the conditions/requirements set forth in the following Attachments:

- Attachment I: Standard Conditions
- Attachment II(A): Special Conditions - Gas Turbine Generators Units GT-1 and GT-2
- Attachment II(B): Special Conditions - Diesel Engine Generators Units D-1, D-2, D-3, D-4 and D-5
- Attachment II(C): Special Conditions - Diesel Engine Generators Units D-6, D-7, D-8 and D-9
- Attachment II(D): Special Conditions - Steam Boiler Unit S-1
- Attachment III: Annual Fee Requirements
- Attachment IV: Annual Emission Reporting Requirements

## PROPOSED

Mr. Alton Miyamoto  
[Issuance Date]  
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The following forms are enclosed for some of the monitoring and reporting required by this Covered Source Permit:

Compliance Certification Form  
Annual Emissions Report Forms: Gas Turbines  
Diesel Engines  
Boiler

Monitoring Report Forms: Fuel Consumption  
Visible Emissions

Excess Emissions and Monitoring System Performance Summary Report

This permit: (a) shall not in any manner affect the title of the premises upon which the equipment is to be located; (b) does not release the permittee from any liability for any loss due to personal injury or property damage caused by, resulting from or arising out of the design, installation, maintenance, or operation of the equipment; and (c) in no manner implies or suggests that the Department of Health, or its officers, agents, or employees, assumes any liability, directly or indirectly, for any loss due to personal injury or property damage caused by, resulting from or arising out of the design, installation, maintenance, or operation of the equipment.

Sincerely,

THOMAS E. ARIZUMI, P.E.  
Chief, Environmental Management Division

DL:lk

Enclosures

c: DHO, Kauai  
Rodney Yama, EHS - Kauai  
CAB Monitoring Section

**ATTACHMENT I: STANDARD CONDITIONS  
COVERED SOURCE PERMIT NO. 0097-01-C**

**[Issuance Date]**

**[Expiration Date]**

This permit is granted in accordance with the Hawaii Administrative Rules (HAR), Title 11, Chapter 60.1, Air Pollution Control, and is subject to the following standard conditions:

1. Unless specifically identified, the terms and conditions contained in this permit are consistent with the applicable requirement, including form, on which each term or condition is based.  
  
(Auth.: HAR §11-60.1-90)
2. This permit, or a copy thereof, shall be maintained at or near the source and shall be made available for inspection upon request. The permit shall not be wilfully defaced, altered, forged, counterfeited, or falsified.  
  
(Auth.: HAR §11-60.1-6; SIP §11-60-11)<sup>2</sup>
3. This permit is not transferable whether by operation of law or otherwise, from person to person, from place to place, or from one piece of equipment to another without the approval of the Department of Health, except as provided in HAR, Section 11-60.1-91.  
  
(Auth.: HAR §11-60.1-7; SIP §11-60-9)<sup>2</sup>
4. A request for transfer from person to person shall be made on forms furnished by the Department of Health.  
  
(Auth.: HAR §11-60.1-7)
5. In the event of any changes in control or ownership of the facilities to be constructed or modified, this permit shall be binding on all subsequent owners and operators. The permittee shall notify the succeeding owner and operator of the existence of this permit and its conditions by letter, copies of which will be forwarded to the Department of Health and the Regional Administrator for the U.S. Environmental Protection Agency (EPA).  
  
(Auth.: HAR §11-60.1-5, §11-60.1-7, §11-60.1-94)
6. The facility covered by this permit shall be constructed and operated in accordance with the application, and any information submitted as part of the application, for the Covered Source Permit. There shall be no deviation unless additional or revised plans are submitted to and approved by the Department of Health, and the permit is amended to allow such deviation.  
  
(Auth.: HAR §11-60.1-2, §11-60.1-4, §11-60.1-82, §11-60.1-84, §11-60.1-90)

7. This permit (a) does not release the permittee from compliance with other applicable statutes of the State of Hawaii, or with applicable local laws, regulations, or ordinances, and (b) shall not constitute, nor be construed to be an approval of the design of the covered source.

(Auth.: HAR §11-60.1-5, §11-60.1-82)

8. The permittee shall comply with all the terms and conditions of this permit. Any permit noncompliance constitutes a violation of HAR, Chapter 11-60.1 and the Clean Air Act and is grounds for enforcement action; for permit termination, suspension, reopening, or amendment; or for denial of a permit renewal application.

(Auth.: HAR §11-60.1-3, §11-60.1-10, §11-60.1-19, §11-60.1-90)

9. If any term or condition of this permit becomes invalid as a result of a challenge to a portion of this permit, the other terms and conditions of this permit shall not be affected and shall remain valid.

(Auth.: HAR §11-60.1-90)

10. The permittee shall not use as a defense in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the terms and conditions of this permit.

(Auth.: HAR §11-60.1-90)

11. This permit may be terminated, suspended, reopened, or amended for cause pursuant to HAR, Sections 11-60.1-10 and 11-60.1-98, and Hawaii Revised Statutes (HRS), Chapter 342B-27, after affording the permittee an opportunity for a hearing in accordance with HRS, Chapter 91.

(Auth.: HAR §11-60.1-3, §11-60.1-10, §11-60.1-90, §11-60.1-98)

12. The filing of a request by the permittee for the termination, suspension, reopening, or amendment of this permit, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

(Auth.: HAR §11-60.1-90)

13. This permit does not convey any property rights of any sort, or any exclusive privilege.

(Auth.: HAR §11-60.1-90)

14. The permittee shall notify the Department of Health in writing of the following dates:

- a. The **anticipated date of initial start-up** for each emission unit of a new source or significant modification not more than sixty (60) days or less than thirty (30) days prior to such date;
- b. The **actual date of construction commencement** within fifteen (15) days after such date; and
- c. The **actual date of start-up** within fifteen (15) days after such date.

(Auth.: HAR §11-60.1-90)

15. The permittee shall furnish, in a timely manner, any information or records requested in writing by the Department of Health to determine whether cause exists for terminating, suspending, reopening, or amending this permit, or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Department of Health copies of records required to be kept by the permittee. For information claimed to be confidential, the Director of Health may require the permittee to furnish such records not only to the Department of Health but also directly to the U.S. EPA Administrator along with a claim of confidentiality.

(Auth.: HAR §11-60.1-14, §11-60.1-90)

16. The permittee shall notify the Department of Health in writing, of the **intent to shut down air pollution control equipment for necessary scheduled maintenance** at least twenty-four (24) hours prior to the planned shutdown. The submittal of this notice shall not be a defense to an enforcement action. The notice shall include the following:

- a. Identification of the specific equipment to be taken out of service, as well as its location and permit number;
- b. The expected length of time that the air pollution control equipment will be out of service;
- c. The nature and quantity of emissions of air pollutants likely to be emitted during the shutdown period;
- d. Measures such as the use of off-shift labor and equipment that will be taken to minimize the length of the shutdown period; and
- e. The reasons why it would be impossible or impractical to shut down the source operation during the maintenance period.

(Auth.: HAR §11-60.1-15; SIP §11-60-16)<sup>2</sup>

17. **Except for emergencies which result in noncompliance with any technology-based emission limitation in accordance with HAR, Section 11-60.1-16.5, in the event any emission unit, air pollution control equipment, or related equipment malfunctions or breaks down in such a manner as to cause the emission of air pollutants in violation of HAR, Chapter 11-60.1 or this permit,** the permittee shall immediately notify the Department of Health of the malfunction or breakdown, unless the protection of personnel or public health or safety demands immediate attention to the malfunction or breakdown and makes such notification infeasible. In the latter case, the notice shall be provided as soon as practicable. Within five (5) working days of this initial notification, the permittee shall also submit, in writing, the following information:
- a. Identification of each affected emission point and each emission limit exceeded;
  - b. Magnitude of each excess emission;
  - c. Time and duration of each excess emission;
  - d. Identity of the process or control equipment causing each excess emission;
  - e. Cause and nature of each excess emission;
  - f. Description of the steps taken to remedy the situation, prevent a recurrence, limit the excessive emissions, and assure that the malfunction or breakdown does not interfere with the attainment and maintenance of the National Ambient Air Quality Standards and state ambient air quality standards;
  - g. Documentation that the equipment or process was at all times maintained and operated in a manner consistent with good practice for minimizing emissions; and
  - h. A statement that the excess emissions are not part of a recurring pattern indicative of inadequate design, operation, or maintenance.

The submittal of these notices shall not be a defense to an enforcement action.

(Auth.: HAR §11-60.1-16; SIP §11-60-16)<sup>2</sup>

18. A copy of applicable correspondence or records submitted to the Department of Health shall be provided to the U.S. EPA Administrator.

(Auth.: HAR §11-60.1-90)

19. The permittee may request confidential treatment of any records in accordance with HAR, Section 11-60.1-14.

(Auth.: HAR §11-60.1-14, §11-60.1-90)

20. This permit shall become invalid with respect to the authorized construction if construction is not commenced as follows:

- a. Construction shall be commenced within eighteen (18) months after the permit takes effect, shall not be discontinued for a period of eighteen (18) months or more, and shall be completed within a reasonable time.
- b. For phased construction projects, each phase shall commence construction within eighteen (18) months of the projected and approved commencement dates in the permit. This provision shall be applicable only if the projected and approved commencement dates of each construction phase are defined in Attachment II, Special Conditions of this permit.

(Auth.: HAR §11-60.1-9, §11-60.1-90)

21. The Department of Health may extend the time periods specified in Standard Condition No. 20 upon a satisfactory showing that an extension is justified. Requests for an extension shall be submitted in writing to the Department of Health.

(Auth.: HAR §11-60.1-9, §11-60.1-90)

22. The permittee shall submit fees in accordance with HAR, Chapter 11-60.1, Subchapter 6.

(Auth.: HAR §11-60.1-90)

23. All certifications shall be in accordance with HAR, Section 11-60.1-4.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

24. The permittee shall allow the Director of Health, the Regional Administrator for the U.S. EPA and/or an authorized representative, upon presentation of credentials or other documents required by law:

- a. To enter the premises where a source is located or emission-related activity is conducted, or where records must be kept under the conditions of this permit and inspect at reasonable times all facilities, equipment, including monitoring and air pollution control equipment, practices, operations, or records covered under the terms and conditions of this permit and request copies of records or copy records required by this permit; and
- b. To sample or monitor at reasonable times substances or parameters to assure compliance with this permit or applicable requirements of HAR, Chapter 11-60.1.

(Auth.: HAR §11-60.1-11, §11-60.1-90)

25. Within thirty (30) days of **permanent discontinuance of the construction, modification, relocation, or operation of the facility covered by this permit**, the discontinuance shall be reported in writing to the Department of Health by a responsible official of the source.

(Auth.: HAR §11-60.1-8; SIP §11-60-10)<sup>2</sup>

26. Each permit renewal application shall be submitted to the Department of Health no less than twelve (12) months and no more than eighteen (18) months prior to the permit expiration date. The Department of Health may allow a permit renewal application to be submitted no less than six (6) months prior to the permit expiration date, if the Department of Health determines that there is reasonable justification.

(Auth.: HAR §11-60.1-101, 40 CFR §70.5 (a)(1)(iii))<sup>1</sup>

27. The terms and conditions included in this permit, including any provision designed to limit a source's potential to emit, are federally enforceable unless such terms, conditions, or requirements are specifically designated as not federally enforceable.

(Auth.: HAR §11-60.1-93)

28. The compliance plan and compliance certification submittal requirements shall be in accordance with HAR, Sections 11-60.1-85 and 11-60.1-86. As specified in HAR, Section 11-60.1-86, the compliance certification shall be submitted to the Department of Health and the U.S. EPA Regional Administrator once per year, or more frequently as set by any applicable requirement.

(Auth.: HAR §11-60.1-90)

29. **Any document (including reports) required to be submitted by this permit shall be certified as being true, accurate, and complete by a responsible official in accordance with HAR, Sections 11-60.1-1 and 11-60.1-4, and shall be mailed to the following address:**

Clean Air Branch  
Environmental Management Division  
State of Hawaii Department of Health  
P.O. Box 3378  
Honolulu, HI 96801-3378

**Upon request, all correspondence to the State of Hawaii Department of Health associated with this Covered Source Permit shall have duplicate copies forwarded to:**

**Chief  
Permits Office, (Attention: Air-3)  
Air Division  
U.S. Environmental Protection Agency  
Region 9  
75 Hawthorne Street  
San Francisco, CA 94105**

(Auth.: HAR §11-60.1-4, §11-60.1-90)

30. To determine compliance with submittal deadlines for time-sensitive documents, the postmark date of the document shall be used. If the document was hand-delivered, the date received ("stamped") at the Clean Air Branch shall be used to determine the submittal date.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

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<sup>1</sup> The citations to the Code of Federal Regulations (CFR) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the CFR. Due to the integration of the preconstruction and operating permit requirements, permit conditions may incorporate more stringent requirements than those set forth in the CFR.

<sup>2</sup> The citations to the State Implementation Plan (SIP) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the SIP.

## PROPOSED

**ATTACHMENT II(A): SPECIAL CONDITIONS  
COVERED SOURCE PERMIT NO. 0097-01-C  
GAS TURBINE GENERATORS UNITS GT-1 AND GT-2**

**[Issuance Date]**

**[Expiration Date]**

In addition to the standard conditions of the Covered Source Permit, the following special conditions shall apply to the permitted facility:

### **Section A. Equipment Description**

1. This portion of the Covered Source Permit encompasses the following equipment and associated appurtenances:
  - a. Gas Turbine Generator Unit GT-1
    - i. One (1) 18.1 MW (nominal) (Simple Cycle)/17.54 MW (nominal) (Combined Cycle) Gas Turbine, Hitachi/General Electric model PG 5251 M, serial no. 214354
    - ii. 258.8 MMBtu/hr (Simple Cycle)/236.8 MMBtu/hr (Combined Cycle) maximum heat input
  - b. Gas Turbine Generator Unit GT-2
    - i. One (1) 22.845 MW (nominal) (Simple Cycle)/22.11 MW (nominal) (Combined Cycle) Gas Turbine, John Brown Model PG 5341, serial no. 244424
    - ii. 303.3 MMBtu/hr (Simple Cycle)/291.4 MMBtu/hr (Combined Cycle) maximum heat input
  - c. General Electric Heat Recovery Steam Generator (HRSG)
- (Auth.: HAR §11-60.1-3)
2. The permittee shall permanently attach an identification tag or nameplate on each piece of equipment which identifies the model number, serial or I.D. number and manufacturer. The identification tag or nameplate shall be attached to the equipment in a conspicuous location.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

### **Section B. Operational and Emission Limitations**

1. Allowable Fuels

Gas turbine generators GT-1 and GT-2 shall be fired only on fuel oil no. 2, naphtha, biodiesel [pure biodiesel (B100)], or any combination thereof, with a maximum sulfur content not to exceed 0.4% by weight.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-38, §11-60.1-90)

2. Visible Emissions (V.E.)

For any six (6) minute averaging period, the gas turbine generators shall not exhibit visible emissions of twenty (20) percent opacity or greater, except as follows: during start-up, shutdown, or equipment breakdown, the gas turbine generators may exhibit visible emissions greater than twenty (20) percent opacity but not exceeding sixty (60) percent opacity for a period aggregating not more than six (6) minutes in any sixty (60) minutes.

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-90; SIP §11-60-24)<sup>2</sup>

**Section C. Monitoring and Recordkeeping Requirements**

1. Fuel Data

Sulfur content of the fuel. The sulfur content of the fuel fired in gas turbine generators GT-1 and GT-2 shall be tested in accordance with the most current American Society of Testing and Materials (ASTM) methods. ASTM method D4294-90 is a suitable alternative to Method D129-91 for determining the sulfur content. The fuel sulfur content shall be verified by both of the following methods:

- a. A representative sample of the fuel fired shall be collected from the fuel pipeline by drip sampling and analyzed for its sulfur content by weight at least once per month; and
- b. A certificate of analysis on the sulfur content shall be obtained for each bulk shipment of fuel delivered by the supplier to the tank farm.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

2. The permittee shall maintain and operate inline fuel meters for the continuous measurement and permanent recording of the consumption of fuel in gas turbine generators GT-1 and GT-2 for the purpose of calculating annual emissions.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

3. Visible Emissions (V.E.)

- a. The permittee shall conduct **monthly** (*calendar month*) V.E. observations for each equipment subject to opacity limitations in accordance with 40 CFR Part 60, Appendix A, Method 9 or by use of a Ringelmann Chart as provided. For each period, two (2) observations shall be taken at fifteen (15) second intervals for six (6) consecutive minutes for each equipment. Records shall be completed and maintained in accordance with the **Visible Emissions Form Requirements**.

- b. The permittee shall conduct **annually** (*calendar year*) V.E. observations for each equipment subject to opacity limits by a certified reader in accordance with 40 CFR Part 60, Appendix A, Method 9. For each period, two (2) observations shall be taken at fifteen (15) second intervals for six (6) consecutive minutes for each equipment. Records shall be completed and maintained in accordance with the **Visible Emissions Form Requirements**.
- c. Upon written request and justification, the Department of Health may waive the requirements for the annual V.E. observations. The waiver request is to be submitted prior to the required test and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior test indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous annual V.E. observations.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-32, §11-60.1-90; SIP §11-60-24)<sup>2</sup>

3. All records, including support information, shall be maintained at the facility for at least five (5) years from the date of the monitoring samples, measurements, tests, reports, or application. Support information includes all calibration and maintenance records and copies of all reports required by the permit. These records shall be in a permanent form suitable for inspection and made available to the Department of Health or their representatives upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

#### **Section D. Notification and Reporting Requirements**

##### **1. Annual Emissions**

As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall submit **on an annual basis** the total tons per year emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due **within sixty (60) days following the end of each calendar year**. The enclosed **Annual Emissions Report Form: Gas Turbines**, shall be used in reporting.

Upon written request of the permittee, the deadline for reporting annual emissions may be extended if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-114)

2. Additional notification and reporting requirements shall be conducted in accordance with

the standard conditions found in Attachment I, Standard Condition Nos. 17 and 25, respectively. These notifications shall include, but not be limited to:

- a. Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedances due to emergencies); and
- b. Permanent discontinuance of construction, modification, relocation or operation of the facility covered by this permit.

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §11-60.1-90)

3. The permittee shall report in writing **within five (5) working days** *any deviations from permit requirements*, including those attributable to upset conditions, the probable cause of such deviations and any corrective actions or preventative measures taken. Corrective actions may include a requirement for more frequent monitoring, or could trigger implementation of a corrective action plan.

(Auth.: HAR §11-60.1-3, §11-60.1-15, §11-60.1-16, §11-60.1-90)

4. Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department of Health and U.S. EPA Region 9, the attached **Compliance Certification Form**, pursuant to HAR §11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall be submitted **within ninety (90) days after the end of each calendar year**, and shall be signed and dated by a responsible official. The compliance certification shall include, at a minimum, the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period;
- e. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification including the requirements of Section 114(a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act; and
- f. Any additional information as required by the Department of Health including information to determine compliance.

Upon written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-4, §11-60.1-86, §11-60.1-90)

5. The permittee shall submit **semi-annually** written reports to the Department of Health for monitoring purposes. The reports shall be submitted **within sixty (60) days after the end of each semi-annual calendar period (January 1 to June 30 and July 1 to December 31)** and shall include the following:
  - a. Any opacity exceedances as determined by the required V.E. monitoring. Each exceedance reported shall include the date, six (6) minute average opacity reading, possible reason for exceedance, duration of exceedance, and corrective actions taken. If there were no exceedances, the permittee shall submit in writing a statement indicating that for each equipment there were no exceedances for that semiannual period.

The enclosed **Monitoring Report Form: Visible Emissions**, shall be used.

- b. The results of the monthly analyses of fuel sulfur content.
- c. Any deviations from permit requirements shall be clearly identified.

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-90; SIP §11-60-24)<sup>2</sup>

#### **Section E. Testing Requirements**

Although a stack test or ambient air monitoring is not required at this time, the Department of Health reserves the right to require, at any time, a stack test or ambient air monitoring to be performed for these sources.

\_\_\_\_(Auth.: HAR §11-60.1-5, §11-60.1-90)

#### **Section F. Agency Notifications**

Any document (including reports) required to be submitted by this permit shall be done in accordance with Attachment I, Standard Condition No. 29.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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<sup>1</sup> The citations to the Code of Federal Regulations (CFR) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the CFR. Due to the integration of the preconstruction and operating permit requirements, permit conditions may incorporate more stringent requirements than those set forth in the CFR.

<sup>2</sup> The citations to the State Implementation Plan (SIP) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the SIP.

**ATTACHMENT II(B): SPECIAL CONDITIONS  
COVERED SOURCE PERMIT NO. 0097-01-C  
DIESEL ENGINE GENERATORS UNITS D-1, D-2, D-3, D-4 AND D-5**

**[Issuance Date]**

**[Expiration Date]**

In addition to the standard conditions of the Covered Source Permit, the following special conditions shall apply to the permitted facility:

**Section A. Equipment Description**

1. This portion of the Covered Source Permit encompasses the following equipment and associated appurtenances:

- a. Diesel Engine Generator Unit D-1
  - i. One (1) 1.8 MW (nominal) Diesel Engine Generator, General Motors EMD model 16-567-D4, serial no. 64-B-10
  - ii. 19.3 MMBtu/hr maximum heat input
- b. Diesel Engine Generator Unit D-2
  - i. One (1) 1.8 MW (nominal) Diesel Engine Generator, General Motors EMD model 16-567-D4, serial no. 64-B-39
  - ii. 19.3 MMBtu/hr maximum heat input
- c. Diesel Engine Generator Unit D-3
  - i. One (1) 2.5 MW (nominal) Diesel Engine Generator, General Motors EMD model 16-645-E4, serial no. 72-D1-1018
  - ii. 27.2 MMBtu/hr maximum heat input
- d. Diesel Engine Generator Unit D-4
  - i. One (1) 2.5 MW (nominal) Diesel Engine Generator, General Motors EMD model 16-645-E4, serial no. 74-G3-1523
  - ii. 27.2 MMBtu/hr maximum heat input
- e. Diesel Engine Generator Unit D-5
  - i. One (1) 2.5 MW (nominal) Diesel Engine Generator, General Motors EMD model 16-645-E4, serial no. 73-C3-1114
  - ii. 27.2 MMBtu/hr maximum heat input

(Auth.: HAR §11-60.1-3)

2. The permittee shall permanently attach an identification tag or nameplate on each piece of equipment which identifies the model number, serial or I.D. number and manufacturer. The identification tag or nameplate shall be attached to the equipment in a conspicuous location.

(Auth.: HAR §11-60.1-5, §11-60.1-90)

**Section B. Operational and Emission Limitations**

**1. Allowable Fuels**

Diesel engine generators D-1, D-2, D-3, D-4 and D-5 shall be fired only on fuel oil no. 2, biodiesel [pure biodiesel (B100)], or any combination thereof, with a maximum sulfur content not to exceed 0.4% by weight. For the purposes of Special Condition Nos. B.3.a, B.3.b and B.4 of this Attachment, 1.0 gallon of fuel oil no. 2 is equivalent to 1.0 gallon of fuel and 1.0 gallon of biodiesel is equivalent to 1.02 gallons of fuel.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-38, §11-60.1-90)

**2. Visible Emissions (V.E.)**

For any six (6) minute averaging period, the diesel engine generators shall not exhibit visible emissions of forty (40) percent opacity or greater, except as follows: during start-up, shutdown, or equipment breakdown, the diesel engine generators may exhibit visible emissions greater than forty (40) percent opacity but not exceeding sixty (60) percent opacity for a period aggregating not more than six (6) minutes in any sixty (60) minutes.

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-90; SIP §11-60-24)<sup>2</sup>

**3. Fuel Use Restrictions**

- a. The total combined amount of fuel oil no. 2 and biodiesel fired in diesel engine generators D-1 and D-2 shall not exceed 1,716,960 gallons of fuel per any rolling twelve (12) month period.
- b. The total combined amount of biodiesel fired in diesel engine generators D-1 and D-2 shall not exceed 343,392 gallons per any rolling twelve (12) month period.
- c. The total combined amount of biodiesel fired in diesel engine generators D-3, D-4 and D-5 shall not exceed 1,040,688 gallons per any rolling twelve (12) month period.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

**4. Upon completion of the following, the fuel use restriction in Special Condition No. B.3.a of this Attachment may be increased to 2,452,800 gallons of fuel, and the fuel use restriction in Special Condition No. B.3.b of this Attachment may be increased to 490,560 gallons of biodiesel:**

- a. The permittee shall increase the exhaust stacks for diesel engine generators D-1 and D-2 from 40 feet to a minimum height of 50 feet above ground elevation.

- b. The Department of Health shall be notified in writing at least **thirty (30) calendar days** *prior to the commencement of the stack height increase project*. At this time, the permittee shall also request that the annual fuel use restriction for diesel engine generators D-1 and D-2 be revised.
- c. The permittee shall receive written approval from Department of Health prior to exceeding the annual fuel use restriction for diesel engine generators D-1 and D-2 required in Special Conditions No. B.3.a and B.3.b of this Attachment.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

### **Section C. Monitoring and Recordkeeping Requirements**

#### **1. Fuel Data**

Sulfur content of the fuel. The sulfur content of the fuel fired in diesel engine generators D-1, D-2, D-3, D-4 and D-5 shall be tested in accordance with the most current American Society of Testing and Materials (ASTM) methods. ASTM method D4294-90 is a suitable alternative to Method D129-91 for determining the sulfur content. The fuel sulfur content shall be verified by both of the following methods:

- a. A representative sample of the fuel fired shall be collected from the fuel pipeline by drip sampling and analyzed for its sulfur content by weight at least once per month; and
- b. A certificate of analysis on the sulfur content shall be obtained for each bulk shipment of fuel delivered by the supplier to the tank farm.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

- 2. The permittee shall maintain and operate a non-resetting volumetric fuel flow metering system for the continuous measurement and permanent recording of the consumption of fuel (fuel oil no. 2 and biodiesel) in diesel engine generators D-1, D-2, D-3, D-4 and D-5. Records shall be maintained on a monthly and rolling twelve (12) month basis.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90)

#### **3. Visible Emissions (V.E.)**

- a. The permittee shall conduct **monthly** (*calendar month*) V.E. observations for each equipment subject to opacity limitations in accordance with 40 CFR Part 60, Appendix A, Method 9 or by use of a Ringelmann Chart as provided. For each period, two (2) observations shall be taken at fifteen (15) second intervals for six (6) consecutive minutes for each equipment. Records shall be completed and maintained in accordance with the **Visible Emissions Form Requirements**.

- b. The permittee shall conduct **annually** (*calendar year*) V.E. observations for each equipment subject to opacity limits by a certified reader in accordance with 40 CFR Part 60, Appendix A, Method 9. For each period, two (2) observations shall be taken at fifteen (15) second intervals for six (6) consecutive minutes for each equipment. Records shall be completed and maintained in accordance with the **Visible Emissions Form Requirements**.
- c. Upon written request and justification, the Department of Health may waive the requirements for the annual V.E. observations. The waiver request is to be submitted prior to the required test and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior test indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous annual V.E. observations.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-32, §11-60.1-90; SIP §11-60-24)<sup>2</sup>

4. All records, including support information, shall be maintained at the facility for at least five (5) years from the date of the monitoring samples, measurements, tests, reports, or application. Support information includes all calibration and maintenance records and copies of all reports required by the permit. These records shall be in a permanent form suitable for inspection and made available to the Department of Health or their representatives upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

#### **Section D. Notification and Reporting Requirements**

##### **1. Annual Emissions**

As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall submit **on an annual basis** the total tons per year emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due **within sixty (60) days after the end of each calendar year**. The enclosed **Annual Emissions Report Form: Diesel Engines**, shall be used in reporting.

Upon written request of the permittee, the deadline for reporting annual emissions may be extended if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-114)

2. Additional notification and reporting requirements shall be conducted in accordance with the standard conditions found in Attachment I, Standard Condition Nos. 17 and 25, respectively. These notifications shall include, but not be limited to:
  - a. Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedances due to emergencies); and
  - b. Permanent discontinuance of construction, modification, relocation or operation of the facility covered by this permit.

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §11-60.1-90)

3. The permittee shall report in writing **within five (5) working days** *any deviations from permit requirements*, including those attributable to upset conditions, the probable cause of such deviations and any corrective actions or preventative measures taken. Corrective actions may include a requirement for more frequent monitoring, or could trigger implementation of a corrective action plan.

(Auth.: HAR §11-60.1-3, §11-60.1-15, §11-60.1-16, §11-60.1-90)

4. Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department of Health and U.S. EPA Region 9, the attached **Compliance Certification Form**, pursuant to HAR §11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall be submitted **within ninety (90) days after the end of each calendar year**, and shall be signed and dated by a responsible official. The compliance certification shall include, at a minimum, the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period;
- e. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification including the requirements of Section 114(a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act; and
- f. Any additional information as required by the Department of Health including information to determine compliance.

Upon written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-4, §11-60.1-86, §11-60.1-90)

5. The permittee shall submit **semi-annually** written reports to the Department of Health for monitoring purposes. The reports shall be submitted **within sixty (60) days** *after the end of each semi-annual calendar period (January 1 to June 30 and July 1 to December 31)* and shall include the following:
  - a. Any opacity exceedances as determined by the required V.E. monitoring. Each exceedance reported shall include the date, six (6) minute average opacity reading, possible reason for exceedance, duration of exceedance, and corrective actions taken. If there were no exceedances, the permittee shall submit in writing a statement indicating that for each equipment there were no exceedances for that semi-annual period.

The enclosed **Monitoring Report Form: Visible Emissions**, shall be used.
  - b. The results of the monthly analyses of fuel sulfur content.
  - c. The total combined fuel consumption (gallons) of fuel oil no. 2 and biodiesel for diesel engine generators D-1 and D-2 on a monthly and rolling twelve (12) month basis. The enclosed **Monitoring Report Form: Fuel Consumption**, shall be used.
  - d. The total combined fuel consumption (gallons) of biodiesel for diesel engine generators D-1 and D-2 on a monthly and rolling twelve (12) month basis. The enclosed **Monitoring Report Form: Fuel Consumption**, shall be used.
  - e. The total combined fuel consumption (gallons) of biodiesel for diesel engine generators D-3, D-4 and D-5 on a monthly and rolling twelve (12) month basis. The enclosed **Monitoring Report Form: Fuel Consumption**, shall be used.
  - f. Any deviations from permit requirements shall be clearly identified.

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-90; SIP §11-60-24)<sup>2</sup>

6. The permittee shall notify the Department of Health in writing at least **thirty (30) calendar days** prior to the commencement of the stack height increase project in accordance with Special Condition No. B.4.b of this Attachment. The Department of Health shall also be sent within **fifteen (15) calendar days** a written certification upon completion of the stack height increase project.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

**Section E. Testing Requirements**

Although a stack test or ambient air monitoring is not required at this time, the Department of Health reserves the right to require, at any time, a stack test or ambient air monitoring to be performed for these sources.

\_\_\_\_(Auth.: HAR §11-60.1-5, §11-60.1-90)

**Section F. Agency Notifications**

Any document (including reports) required to be submitted by this permit shall be done in accordance with Attachment I, Standard Condition No. 29.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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<sup>1</sup> The citations to the Code of Federal Regulations (CFR) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the CFR. Due to the integration of the preconstruction and operating permit requirements, permit conditions may incorporate more stringent requirements than those set forth in the CFR.

<sup>2</sup> The citations to the State Implementation Plan (SIP) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the SIP.

**ATTACHMENT II(C): SPECIAL CONDITIONS  
COVERED SOURCE PERMIT NO. 0097-01  
DIESEL ENGINE GENERATORS UNITS D-6, D-7, D-8 AND D-9**

**[Issuance Date]**

**[Expiration Date]**

In addition to the standard conditions of the Covered Source Permit, the following special conditions shall apply to the permitted facility:

**Section A. Equipment Description**

1. This portion of the Covered Source Permit encompasses the following equipment and associated appurtenances:
  - a. Diesel Engine Generator Unit D-6
    - i. One (1) 7.86 MW (nominal) Stork-Wartsila Diesel Generator model 6TM620, serial no. 60600
    - ii. 69.5 MMBtu/hr maximum heat input
    - iii. Equipped with Variable Fuel Injection Timing Retard (FITR)
  - b. Diesel Engine Generator Unit D-7
    - i. One (1) 7.86 MW (nominal) Stork-Wartsila Diesel Generator model 6TM620, serial no. 60700
    - ii. 69.5 MMBtu/hr maximum heat input
    - iii. Equipped with Variable Fuel Injection Timing Retard (FITR)
  - c. Diesel Engine Generator Unit D-8
    - i. One (1) 7.86 MW (nominal) Stork-Wartsila Diesel Generator model 6TM620, serial no. 60800
    - ii. 69.5 MMBtu/hr maximum heat input
    - iii. Equipped with Variable Fuel Injection Timing Retard (FITR)
  - d. Diesel Engine Generator Unit D-9
    - i. One (1) 7.86 MW (nominal) Stork-Wartsila Diesel Generator model 6TM620, serial no. 60900
    - ii. 69.5 MMBtu/hr maximum heat input
    - iii. Equipped with Selective Catalytic Reduction (SCR)
2. The permittee shall permanently attach an identification tag or nameplate on each piece of equipment which identifies the model number, serial or I.D. number and manufacturer. The identification tag or nameplate shall be attached to the equipment in a conspicuous location.

(Auth.: HAR §11-60.1-3)

(Auth.: HAR §11-60.1-5, §11-60.1-90)

**Section B. Applicable Federal Regulations**

This Covered Source Permit incorporates conditional requirements from an existing permit issued pursuant to 40 CFR Part 52.21, Prevention of Significant Deterioration of Air Quality.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-132; 40 CFR 52.21)<sup>1</sup>

**Section C. Operational and Emission Limitations**

**1. Air Pollution Control Equipment**

The permittee shall continuously operate and maintain the following air pollution controls to meet the emission limits as specified in Special Condition Nos. C.5 and C.6 of this Attachment:

- a. The use of turbocharging and intercooling on diesel engine generators D-6, D-7, D-8 and D-9;
- b. The use of good combustion practices and high combustion efficiency on diesel engine generators D-6, D-7, D-8 and D-9;
- c. Variable Fuel Injection Timing Retard (FITR) on diesel engine generators D-6, D-7 and D-8. The variable FITR shall retard the engine's injection timing 4 degrees from the manufacturer's standard injection timing setting at 50 percent of rated capacity and shall increase the retard linearly to 8 degrees retard at 100 percent of rated capacity. Between 100 and 110 percent of rated capacity, the engines shall be retarded 8 degrees from the manufacturer's standard injection timing setting; and
- d. Selective catalytic reduction (SCR) system including an ammonia slip monitoring system on diesel engine generator D-9. The ammonia slip shall remain below 20 ppmvd at 15% O<sub>2</sub>.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-132; 40 CFR 52.21)<sup>1</sup>

**2. Allowable Fuels**

Diesel engine generators D-6, D-7, D-8 and D-9 shall be fired only on fuel oil no. 2, biodiesel [pure biodiesel (B100)], or any combination thereof, with a maximum sulfur content not to exceed 0.4% by weight.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-38, §11-60.1-90)

3. Maximum Fuel Consumption

The total combined fuel consumption for diesel engine generators D-6, D-7, D-8 and D-9 shall not exceed the rate of 54,610 gallons per day and 19,930,000 gallons per any rolling twelve (12) month period.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-132; 40 CFR 52.21)<sup>1</sup>

4. Operating Load Limits

The permittee shall not allow the operation of diesel engine generators D-6, D-7, D-8 and D-9 below 50 percent of rated load, except during equipment startup, shutdown, maintenance, or testing. The permittee shall not allow the operation of diesel engine generators D-6, D-7, D-8 and D-9 above 110 percent of rated loads at any time.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-132; 40 CFR 52.21)<sup>1</sup>

5. Maximum Emission Limits

The permittee shall not discharge or cause the discharge into the atmosphere from each of diesel engine generators D-6, D-7, D-8 and D-9, nitrogen oxides, sulfur dioxide, carbon monoxide, volatile organic compounds and particulate matter in excess of the following specified limits:

Compound	Maximum Emission Limits* (lbs/hr)
Sulfur Dioxide	33.14
Nitrogen Oxides (as NO <sub>2</sub> )	
Units D-6, D-7 and D-8	185.22
Unit D-9	68.28
Carbon Monoxide	
Units D-6, D-7 and D-8	23.90
Unit D-9	45.00
Volatile Organic Compounds as Carbon	22.80
Particulate Matter	7.85

\*Three-hour averages.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-132; 40 CFR 52.21)<sup>1</sup>

6. Emission Limitations for Generator Loads

The permittee shall not discharge or cause the discharge into the atmosphere from each of diesel engine generators D-6, D-7, D-8 and D-9, nitrogen oxides, sulfur dioxide, carbon monoxide, volatile organic compounds and particulate matter in excess of the following specified limits at full load:

Compound	Emission Limits for Each Diesel Engine Generator* at Full Load (@ 15% O <sub>2</sub> )
	100-110%
Sulfur Dioxide (ppmvd)	97
Nitrogen Oxides (ppmvd) as NO <sub>2</sub>	
Units D-6, D-7 and D-8	590
Unit D-9	290
Carbon Monoxide (ppmvd)	
Units D-6, D-7 and D-8	160
Unit D-9	302
Volatile Organic Compounds (ppmvd) as Carbon	267
Particulate Matter (lb/MMBtu)	
Units D-6, D-7 and D-8	0.11
Unit D-9	0.11

\*Three-hour averages.

If any emission limit is lowered, the difference between the existing emission limit and the revised lower emission limit shall not be allowed as an emission offset for future construction or modification.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-132; 40 CFR 52.21)<sup>1</sup>

7. Visible Emissions (V.E.)

For any six (6) minute averaging period, the diesel engine generators shall not exhibit visible emissions of twenty (20) percent opacity or greater, except as follows: during start-up, shutdown, or equipment breakdown, the diesel engine generators may exhibit visible emissions greater than twenty (20) percent opacity but not exceeding sixty (60) percent opacity for a period aggregating not more than six (6) minutes in any sixty (60) minutes.

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-90; SIP §11-60-24)<sup>2</sup>

**Section D. Monitoring and Recordkeeping Requirements**

1. The permittee shall operate and maintain a Continuous Emissions Monitoring System (CEMS) to measure and record the NO<sub>x</sub>, and CO<sub>2</sub> or O<sub>2</sub> concentrations in the stack gas from diesel engine generators D-6, D-7, D-8 and D-9. If a CO<sub>2</sub> CEMS is used, 40 CFR Part 60, Appendix A, Method 20, Equations 20-2 and 20-5 shall be used. The system shall meet EPA performance specifications (40 CFR §60.13 and 40 CFR Part 60, Appendices B and F).

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-132; 40 CFR 52.21)<sup>1</sup>

2. The permittee shall operate and maintain continuous monitors to measure and record the operating load for diesel engine generators D-6, D-7, D-8 and D-9.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-132; 40 CFR 52.21)<sup>1</sup>

3. The permittee shall operate and maintain a total volumetric flow metering system for the continuous measurement and recording of the fuel usage in diesel engine generators D-6, D-7, D-8 and D-9.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-132; 40 CFR 52.21)<sup>1</sup>

4. Fuel Data

- a. Sulfur content of the fuel. The sulfur content of the fuel fired in diesel engine generators D-6, D-7, D-8 and D-9 shall be tested in accordance with the most current American Society of Testing and Materials (ASTM) methods. ASTM Method D4294-90 is a suitable alternative to Method D129-91 for determining the sulfur content. The fuel sulfur content shall be verified by both of the following methods:
  - i. A representative sample of the fuel fired shall be collected from the fuel pipeline by drip sampling and analyzed for its sulfur content by weight at least once per month; and
  - ii. A certificate of analysis on the sulfur content shall be obtained for each bulk shipment of fuel delivered by the supplier to the tank farm.
- b. Records on the total amount of fuel fired in diesel engine generators D-6, D-7, D-8 and D-9 shall be maintained on a daily, monthly and rolling twelve (12) month basis.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-132; 40 CFR 52.21)<sup>1</sup>

5. The permittee shall operate and maintain a combustion efficiency monitoring system, consisting of a CO continuous emission monitor (CEM) and each unit's operating load monitor specified in Special Condition No. D.2 of this Attachment, as an alternative to a transmissometer continuous monitoring system provided a correlation is established between each unit's stack opacity and the combustion efficiency monitoring system. The continuous emission monitor (CEM) shall measure and record the CO concentrations in the stack gas from diesel engine generators D-6, D-7, D-8 and D-9. The system shall meet EPA performance specifications (40 CFR §60.13 and 40 CFR Part 60, Appendices B and F).

In addition, if the emissions from any of the four (4) diesel engine generators frequently exceed the opacity limits specified in Special Condition No. C.7 of this Attachment or is determined to be in violation of the opacity limits, the Department of Health, at its discretion, may require the installation, operation and maintenance of a transmissometer continuous monitoring system for the implicated engine. The transmissometer continuous monitoring system shall be installed within one hundred eighty (180) days upon written receipt from the Department of Health requiring installation of the transmissometer continuous monitoring system. The transmissometer continuous monitoring system shall measure and record the opacity of stack emissions for diesel engine generators D-6, D-7, D-8 and D-9. The system shall meet EPA monitoring performance standards (40 CFR §60.13 and 40 CFR Part 60, Appendix B).

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-132; 40 CFR 52.21)<sup>1</sup>

6. Visible Emissions (V.E.)

- a. The permittee shall conduct **annually** (*calendar year*) V.E. observations for each equipment subject to opacity limits by a certified reader in accordance with 40 CFR Part 60, Appendix A, Method 9. For each period, two (2) observations shall be taken at fifteen (15) second intervals for six (6) consecutive minutes for each equipment. Records shall be completed and maintained in accordance with the **Visible Emissions Form Requirements**.
- b. Upon written request and justification, the Department of Health may waive the requirements for the annual V.E. observations. The waiver request is to be submitted prior to the required test and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior test indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous annual V.E. observations.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-32, §11-60.1-90; SIP §11-60-24)<sup>2</sup>

7. The permittee shall maintain a file of all measurements and monitoring data, including the monitoring system performance evaluations; calibration checks; and adjustments and maintenance performed on the system or devices and all other information required to be recorded by 40 CFR §60.13 in a permanent form suitable for inspection.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-132; 40 CFR 52.21)<sup>1</sup>

8. All records, including support information, shall be maintained at the facility for at least five (5) years from the date of the monitoring samples, measurements, tests, reports, or application. Support information includes all calibration and maintenance records and copies of all reports required by the permit. These records shall be in a permanent form suitable for inspection and made available to the Department of Health or their representatives upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

#### **Section E. Notification and Reporting Requirements**

##### **1. Excess Emissions**

- a. The permittee shall submit an excess emissions and opacity report to the Department of Health for **every semi-annual calendar period**. The report shall include the following:
  - i. The magnitude of excess emissions and opacity computed in accordance with 40 CFR §60.13(h), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions and opacity.
  - ii. Specific identification of each period of excess emissions and opacity that occurs including during startups, shutdowns and malfunctions of the diesel engine generators. The nature and cause of any malfunction (if known), and the corrective action taken or preventive measures adopted, shall also be reported.
  - iii. The date and time identifying each period during which the continuous emissions monitoring system and combustion efficiency monitoring system or transmissometer was inoperative except for zero and span checks. The nature of each system repair or adjustments shall be described.
  - iv. The report shall so state if no excess emissions or opacity have occurred. Also, the report shall state if the continuous emission monitoring system and combustion efficiency monitoring system or transmissometer operated properly during the period and was not subject to any repairs or adjustments except for zero and span checks.

- b. All reports shall be postmarked by the **30th day following the end of each semi-annual calendar period**. The enclosed **Excess Emissions and Monitoring System Performance Summary Report** form shall also be submitted in addition to the excess emissions and monitoring systems performance report.
  - i. Excess emissions shall be defined as any 3-hour period during which the average emissions of NO<sub>x</sub>, as measured by the continuous emissions monitoring system or determined through calculations based on the information obtained for the continuous monitoring systems, exceed the emission limits set forth in Special Condition Nos. C.5 and C.6 of this Attachment. Excess opacity shall be defined as any rolling 6-minute period during which the average opacity as measured by each monitoring cycle indicated by the combustion efficiency monitoring system or a transmissometer continuous monitoring system, which shall be representative of a 6-minute period, exceed the opacity limits set forth in Special Condition No. C.7. of this Attachment.
- c. Excess emissions indicated by the continuous emissions monitoring system, except during the “start-up” and “shut-down” periods shall be considered violations of the applicable emission limit for the purposes of the permit. Excess opacity identified by the combustion efficiency monitoring system shall not be considered violations of the applicable opacity limit for the purposes of this permit. Excess opacity identified by a transmissometer continuous monitoring system shall be considered violations of the applicable opacity limit for the purposes of this permit.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-132; 40 CFR 52.21)<sup>1</sup>

## 2. Annual Emissions

As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall submit **on an annual basis** the total tons per year emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due **within sixty (60) days after the end of each calendar year**. The enclosed **Annual Emission Report Form: Diesel Engines**, shall be used in reporting.

Upon written request of the permittee, the deadline for reporting annual emissions may be extended if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-114)

- 3. Additional notification and reporting requirements shall be conducted in accordance with the standard conditions found in Attachment I, Standard Condition Nos. 16, 17, and 25, respectively. These notifications shall include, but not be limited to:
  - a. Intent to shut down air pollution control equipment for necessary scheduled maintenance;

- b. Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedances due to emergencies); and
- c. Permanent discontinuance of construction, modification, relocation or operation of the facility covered by this permit.

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §11-60.1-90)

- 4. The permittee shall report in writing **within five (5) working days** *any deviations from permit requirements*, including those attributable to upset conditions, the probable cause of such deviations and any corrective actions or preventative measures taken. Corrective actions may include a requirement for additional stack testing or more frequent monitoring, or could trigger implementation of a corrective action plan.

(Auth.: HAR §11-60.1-3, §11-60.1-15, §11-60.1-16, §11-60.1-90)

5. Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department of Health and U.S. EPA Region 9, the attached **Compliance Certification Form**, pursuant to HAR §11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall be submitted **within ninety (90) days after the end of each calendar year**, and shall be signed and dated by a responsible official. The compliance certification shall include, at a minimum, the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period;
- e. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification including the requirements of Section 114(a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act; and
- f. Any additional information as required by the Department of Health including information to determine compliance.

Upon written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-4, §11-60.1-86, §11-60.1-90)

6. The permittee shall submit **semi-annually** written reports to the Department of Health for monitoring purposes. The reports shall be submitted **within sixty (60) days** *after the end of each semi-annual calendar period (January 1 to June 30 and July 1 to December 31)* and shall include the following:

- a. The results of the monthly analyses of fuel sulfur content.
- b. The fuel consumption (gallons) for diesel engine generators D-6, D-7, D-8 and D-9 on a monthly and rolling twelve (12) month basis. Any exceedance of the daily fuel limitation shall also be reported. The enclosed **Monitoring Report Form: Fuel Consumption**, shall be used.
- c. Any deviations from permit requirements shall be clearly identified.

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-90, §11-60.1-132; 40 CFR 52.21, SIP §11-60-24)<sup>1,2</sup>

7. At least **thirty (30) days** prior to the following events, the permittee shall notify the Department of Health in writing of:

- a. Conducting a performance specification test on the Continuous Emissions Monitoring System (CEMS) and combustion efficiency monitoring system or transmissometer. The testing date shall be in accordance with the performance test date identified in 40 CFR §60.13.
- b. Conducting a source performance test as required in Attachment II(C), Section F, Testing Requirements.

(Auth.: HAR §11-60.1-3, §11-60.1-90, §11-60.1-132; 40 CFR 52.21)<sup>1</sup>

#### **Section F. Testing Requirements**

1. The permittee shall conduct or cause to be conducted performance tests on diesel engine generators D-6, D-7, D-8 and D-9. Performance tests shall be conducted for nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>), carbon monoxide (CO), volatile organic compounds (VOC) and particulate matter (PM). The ammonia slip from the SCR system on diesel engine generator D-9 shall also be tested. Performance tests shall be conducted on an annual basis or at such times as may be specified by the Department of Health.

All performance tests shall be conducted between 100 and 110 percent of operating capacity of the units being tested. Tests may be required at other operating capacities as may be specified by the Department of Health.

Upon written request and justification, the Department of Health may waive the requirement for a specific performance test. The waiver request is to be submitted prior to the required test and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior tests indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous source test.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-132; 40 CFR 52.21)<sup>1</sup>

2. Performance tests for the emissions of NO<sub>x</sub>, SO<sub>2</sub>, CO, VOC and PM shall be conducted and results reported in accordance with the test methods set forth in 40 CFR Part 60, Appendix A, and 40 CFR §60.8. The following test methods or U.S. EPA-approved equivalent methods with prior written approval from the Department of Health shall be used:
  - a. Performance tests for the emissions of SO<sub>2</sub> shall be conducted using 40 CFR Part 60 Methods 1-4 and 6.
  - b. Performance tests for the emissions of NO<sub>x</sub> shall be conducted using 40 CFR Part 60 Methods 1-4 and 7.
  - c. Performance tests for the emissions of CO shall be conducted using 40 CFR Part 60 Methods 1-4 and 10.
  - d. Performance tests for the emissions of VOC shall be conducted using 40 CFR Part 60 Methods 1-4 and 25A.
  - e. Performance tests for the emissions of particulate matter shall be conducted using 40 CFR Part 60 Methods 1-5.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-132; 40 CFR 52.21)<sup>1</sup>

3. At least **thirty (30) days** prior to performing a test, the permittee shall submit a written *performance test plan* to the Department of Health that describes the test duration, test locations, test methods, source operation and other parameters that may affect test results. Such a plan shall conform to U.S. EPA guidelines including quality assurance procedures. A test plan or quality assurance plan that does not have the approval of the Department of Health may be grounds to invalidate any test and require a retest.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-132; 40 CFR 52.21)<sup>1</sup>

4. The permittee, at its own expense, shall be responsible for installing and providing the necessary ports in stacks or ducts and such other safe and proper sampling and testing facilities as may be necessary for the determination of the air pollutants emissions. The tests shall be conducted at the operating capacities identified in Special Condition No. F.1 of this Attachment, and the Department of Health may monitor the tests.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-132; 40 CFR 52.21)<sup>1</sup>

5. The performance test shall consist of three (3) separate runs using the applicable test method. For the purpose of determining compliance with an applicable regulation, the arithmetic mean of the results from the three (3) runs shall apply.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

6. Any deviations from these conditions, test methods, or procedures may be cause for rejection of the test results unless such deviations receive written approval by the Department of Health before the tests.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

7. Within **sixty (60) days** after completion of the performance test, the permittee shall submit to the Department of Health and U.S. EPA Region 9 (Attention: AIR-3) the test report which shall include the operating conditions of diesel engine generators D-6, D-7, D-8 and D-9 at the time of the test, the analysis of the fuel oil, the summarized test results, comparative results with the permit emission limits, and other pertinent field and laboratory data.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90, §11-60.1-132; 40 CFR 52.21)<sup>1</sup>

#### **Section G. Agency Notification**

Any document (including reports) required to be submitted by this permit shall be done in accordance with Attachment I, Standard Condition No. 29.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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<sup>1</sup> The citations to the Code of Federal Regulations (CFR) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the CFR. Due to the integration of the preconstruction and operating permit requirements, permit conditions may incorporate more stringent requirements than those set forth in the CFR.

<sup>2</sup> The citations to the State Implementation Plan (SIP) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the SIP.

## PROPOSED

### ATTACHMENT II(D): SPECIAL CONDITIONS COVERED SOURCE PERMIT NO. 0097-01-C STEAM BOILER UNIT S-1

[Issuance Date]

[Expiration Date]

In addition to the standard conditions of the Covered Source Permit, the following special conditions shall apply to the permitted facility:

#### **Section A. Equipment Description**

1. This portion of the Covered Source Permit encompasses the following equipment and associated appurtenances:
  - a. Steam Boiler, Unit S-1
    - i. One (1) 120,000 lb/hr (nominal) Steam Boiler, Combustion Engineering model 20810, serial no. 20810
    - ii. 156.3 MMBtu/hr maximum heat input
    - iii. Equipped with Low NO<sub>x</sub> Burners
  - b. 10 MW (nominal) Steam Turbine Generator
2. The permittee shall permanently attach an identification tag or nameplate on each piece of equipment which identifies the model number, serial or I.D. number and manufacturer. The identification tag or nameplate shall be attached to the equipment in a conspicuous location.

(Auth.: HAR §11-60.1-3)

(Auth.: HAR §11-60.1-5, §11-60.1-90)

#### **Section B. Operational and Emission Limitations**

1. Steam boiler S-1 shall be fired on fuel oil no. 2, biodiesel [pure biodiesel (B100)], or any combination thereof, with a maximum sulfur content not to exceed 0.4% by weight.
2. Specification (spec) used oil (including transformer specification used oil with a PCB content of less than 2 ppm) may be burned in steam boiler S-1 at a maximum rate of 20.8 gallons per hour (15,000 gallons per month). Transformer specification used oil with a PCB content of greater than 2 ppm may be burned in steam boiler S-1 at a maximum rate of 4.5 gallons per hour (gph). The specification used oil or transformer specification used oil shall be blended and burned with fuel oil no. 2 at all times.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

3. Before the burning of specification used oil, any transformer specification used oil with a PCB content of greater than 2 ppm that is stored in the dedicated specification used oil storage tank must be burned or drained completely. If specification used oil and transformer specification used oil with a PCB content greater than 2 ppm is blended in the dedicated specification used oil storage tank, the maximum rate of burning this blended used oil in steam boiler S-1 shall be 4.5 gallons per hour (gph).

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

4. The permittee shall only burn specification used oil that is generated by the permittee, such as crankcase oils, turbine oils and transformer oils that meets the specifications of specification (spec) used oil. Specification used oil from other sources may be burned, provided prior written approval is obtained from the Department of Health. The permittee shall also only burn transformer specification used oil that is generated by the permittee.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

5. The constituents/properties of the specification used oil or transformer specification used oil burned in steam boiler S-1 shall not exceed the limits specified below:

<u>Constituent/Property</u>	<u>Allowable Limit</u>
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Sulfur	2% maximum by weight
Flash Point	100°F minimum
Polychlorinated Biphenyls (PCB)*	2 ppm maximum

\*applicable to spec used oil only

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

6. This permit does not authorize the permittee to burn hazardous waste. The permittee shall not burn the used oil if determined or declared to be a hazardous waste.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

7. The permit conditions contained herein may at any time be revised by the Department of Health to reflect federal or state promulgated rules on specification used oil.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

8. The permit conditions contained herein may at any time be revised by the Department of Health to reflect federal or state promulgated rules on Hazardous Air Pollutants.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

9. The conditions of this permit shall not release the permittee from compliance with all applicable state and federal rules and regulations on the handling, transporting, storing and burning of specification used oil. If the conditions in this permit are determined to be in conflict with any federal rules concerning specification used oil, the section of the permit regarding specification used oil shall be surrendered upon request of the Department of Health.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

10. Visible Emissions (V.E.)

For any six (6) minute averaging period, the steam boiler shall not exhibit visible emissions of forty (40) percent opacity or greater, except as follows: during start-up, shutdown, or equipment breakdown, the steam boiler may exhibit visible emissions greater than forty (40) percent opacity but not exceeding sixty (60) percent opacity for a period aggregating not more than six (6) minutes in any sixty (60) minutes.

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-90; SIP §11-60-24)<sup>2</sup>

**Section C. Monitoring and Recordkeeping Requirements**

1. The permittee shall maintain and operate a non-resetting volumetric fuel flow metering system to monitor and record the total flow rates (gallons per hour) of the specification used oil and transformer specification used oil burned in steam boiler S-1.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90)

2. Fuel Data

Sulfur content of the fuel. The sulfur content of the fuel oil no. 2 fired in steam boiler S-1 shall be tested in accordance with the most current American Society of Testing and Materials (ASTM) methods. ASTM method D4294-90 is a suitable alternative to Method D129-91 for determining the sulfur content. The fuel oil sulfur content shall be verified by both of the following methods:

- i. A representative sample of the fuel oil fired shall be collected from the fuel pipeline by drip sampling and analyzed for its sulfur content by weight at least once per month; and

- ii. A certificate of analysis on the sulfur content shall be obtained for each bulk shipment of fuel oil delivered by the supplier to the tank farm.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

- 3. Samples shall be taken from each 55-gallon barrel and temporary holding tank (250 gallons) collecting the specification used oil. The sample from the holding tank shall be taken after thorough manual mixing of the contents of the tank to insure that it is representative of all of the oil in that tank. The holding tank sample shall represent no more than all of the oil collected in any three (3) month period.

In addition, a sample shall be taken of the specification used oil in the Stork-Wartsila Diesel (SWD) spec used oil tank (8000 gallons) each time used oil is transferred from the SWD tank to the No. 6 tank, but no less frequently than every three (3) months.

Each sample shall be submitted in a timely manner to a qualified laboratory and an analysis obtained for the constituents/properties for which limits are given in Special Condition No. B.5 of this Attachment. No specification used oil shall be drawn from the No. 6 tank until the required analysis has been completed to demonstrate that the used oil transferred from the SWD tank meets the applicable limits.

Records of the used oil analyses shall be maintained at the facility for at least five (5) years from the date of the monitoring samples, measurements or reports.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

- 4. A screening field test shall be performed for each individual batch of transformer used oil to determine the concentration of polychlorinated biphenyls (PCBs).
  - a. If the screening field test indicates a PCB content **greater** than 50 ppm, that batch of transformer used oil shall not be burned and shall be disposed of in accordance with state or federal regulations.
  - b. If the screening field test indicates a PCB content **below** 50 ppm, a sample shall be submitted in a timely manner to a qualified laboratory and an analysis obtained to verify the PCB concentration. If the analysis indicates a PCB content **greater** than 49 ppm, that transformer used oil shall not be burned and shall be disposed of in accordance with state or federal regulations.
  - c. If the screening field test indicates a PCB content **below** 50 ppm, a sample shall be submitted in a timely manner to a qualified laboratory and an analysis obtained to verify the PCB concentration. If the analysis indicates a PCB content **below** 49 ppm, that transformer used oil shall be temporarily emptied into a 55-gallon drum.

When the 55-gallon drum becomes full, a sample shall be submitted in a timely manner to a qualified laboratory and an analysis obtained for the constituents/properties for which limits are given in Special Condition No. B.5 of this Attachment.

- d. Records of the transformer used oil analyses shall be maintained on a monthly basis.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-11, §11-60.1-90)

5. The analyses required in Special Condition Nos. C.3 and C.4.c of this Attachment shall be obtained prior to storing the specification used oil or transformer specification used oil in the dedicated 2,000 gallon specification used oil tank.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90)

6. Visible Emissions (V.E.)

- a. The permittee shall conduct **monthly** (*calendar month*) V.E. observations for each equipment subject to opacity limitations in accordance with 40 CFR Part 60, Appendix A, Method 9 or by use of a Ringelmann Chart as provided. For each period, two (2) observations shall be taken at fifteen (15) second intervals for six (6) consecutive minutes for each equipment. Records shall be completed and maintained in accordance with the **Visible Emissions Form Requirements**.
- b. The permittee shall conduct **annually** (*calendar year*) V.E. observations for each equipment subject to opacity limits by a certified reader in accordance with 40 CFR Part 60, Appendix A, Method 9. For each period, two (2) observations shall be taken at fifteen (15) second intervals for six (6) consecutive minutes for each equipment. Records shall be completed and maintained in accordance with the **Visible Emissions Form Requirements**.
- c. Upon written request and justification, the Department of Health may waive the requirements for the annual V.E. observations. The waiver request is to be submitted prior to the required test and must include documentation justifying such action. Documentation should include, but is not limited to, the results of the prior test indicating compliance by a wide margin, documentation of continuing compliance, and further that operations of the source have not changed since the previous annual V.E. observations.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-32, §11-60.1-90; SIP §11-60-24)<sup>2</sup>

7. All records, including support information, shall be maintained at the facility for at least five (5) years from the date of the monitoring samples, measurements, tests, reports, or application. Support information includes all calibration and maintenance records and copies of all reports required by the permit. These records shall be in a permanent form suitable for inspection and made available to the Department of Health or their representatives upon request.

(Auth.: HAR §11-60.1-3, §11-60.1-11, §11-60.1-90)

#### **Section D. Notification and Reporting Requirements**

##### **1. Annual Emissions**

As required by Attachment IV and in conjunction with the requirements of Attachment III, Annual Fee Requirements, the permittee shall submit **on an annual basis** the total tons per year emitted of each regulated air pollutant, including hazardous air pollutants. The reporting of annual emissions is due **within sixty (60) days after following the end of each calendar year**. The enclosed **Annual Emissions Report Form: Boiler**, shall be used in reporting.

Upon written request of the permittee, the deadline for reporting annual emissions may be extended if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-3, §11-60.1-5, §11-60.1-90, §11-60.1-114)

2. Additional notification and reporting requirements shall be conducted in accordance with the standard conditions found in Attachment I, Standard Condition Nos. 17 and 25, respectively. These notifications shall include, but not be limited to:
  - a. Emissions of air pollutants in violation of HAR, Chapter 11-60.1 or this permit (excluding technology-based emission exceedances due to emergencies); and
  - b. Permanent discontinuance of construction, modification, relocation or operation of the facility covered by this permit.

(Auth.: HAR §11-60.1-8, §11-60.1-15, §11-60.1-16, §11-60.1-90)

3. The permittee shall report in writing **within five (5) working days** any deviations from permit requirements, including those attributable to upset conditions, the probable cause of such deviations and any corrective actions or preventative measures taken. Corrective actions may include a requirement for more frequent monitoring, or could trigger implementation of a corrective action plan.

(Auth.: HAR §11-60.1-3, §11-60.1-15, §11-60.1-16, §11-60.1-90)

4. Compliance Certification

During the permit term, the permittee shall submit at least **annually** to the Department of Health and U.S. EPA Region 9, the attached **Compliance Certification Form**, pursuant to HAR §11-60.1-86. The permittee shall indicate whether or not compliance is being met with each term or condition of this permit. The compliance certification shall be submitted **within ninety (90) days after the end of each calendar year**, and shall be signed and dated by a responsible official. The compliance certification shall include, at a minimum, the following information:

- a. The identification of each term or condition of the permit that is the basis of the certification;
- b. The compliance status;
- c. Whether compliance was continuous or intermittent;
- d. The methods used for determining the compliance status of the source currently and over the reporting period;
- e. Any additional information indicating the source's compliance status with any applicable enhanced monitoring and compliance certification including the requirements of Section 114(a)(3) of the Clean Air Act or any applicable monitoring and analysis provisions of Section 504(b) of the Clean Air Act; and
- f. Any additional information as required by the Department of Health including information to determine compliance.

Upon written request of the permittee, the deadline for submitting the compliance certification may be extended, if the Department of Health determines that reasonable justification exists for the extension.

(Auth.: HAR §11-60.1-4, §11-60.1-86, §11-60.1-90)

5. The permittee shall submit **semi-annually** written reports to the Department of Health for monitoring purposes. The reports shall be submitted **within sixty (60) days after the end of each semi-annual calendar period (January 1 to June 30 and July 1 to December 31)** and shall include the following:

- a. Any opacity exceedances as determined by the required V.E. monitoring. Each exceedance reported shall include the date, six (6) minute average opacity reading, possible reason for exceedance, duration of exceedance, and corrective actions taken. If there were no exceedances, the permittee shall submit in writing a statement indicating that for each equipment there were no exceedances for that semi-annual period.

The enclosed **Monitoring Report Form: Visible Emissions**, shall be used.

- b. The results of the monthly analyses of fuel sulfur content.

- c. A summary report of all of the used oil and transformer used oil analyses required under Special Condition Nos. C.3 and C.4.c of this Attachment shall be submitted to the Department **within forty-five (45) days after the end of each calendar year**. The report shall be signed and dated by an authorized representative. The summary report shall include, at a minimum, sampling dates, the amount of used oil or transformer used oil sampled, dates the samples were analyzed, the amounts of used oil or transformer used oil represented by the samples, and the results of the analyses.
- d. Any deviations from permit requirements shall be clearly identified.

(Auth.: HAR §11-60.1-3, §11-60.1-32, §11-60.1-90; SIP §11-60-24)<sup>2</sup>

#### **Section E. Testing Requirements**

Although a stack test or ambient air monitoring is not required at this time, the Department of Health reserves the right to require, at any time, a stack test or ambient air monitoring to be performed for these sources.

\_\_\_\_(Auth.: HAR §11-60.1-5, §11-60.1-90)

#### **Section F. Agency Notifications**

Any document (including reports) required to be submitted by this permit shall be done in accordance with Attachment I, Standard Condition No. 29.

(Auth.: HAR §11-60.1-4, §11-60.1-90)

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<sup>1</sup> The citations to the Code of Federal Regulations (CFR) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the CFR. Due to the integration of the preconstruction and operating permit requirements, permit conditions may incorporate more stringent requirements than those set forth in the CFR.

<sup>2</sup> The citations to the State Implementation Plan (SIP) identified under a particular condition, indicate that the permit condition complies with the specified provision(s) of the SIP.

## PROPOSED

### ATTACHMENT III: ANNUAL FEE REQUIREMENTS COVERED SOURCE PERMIT NO. 0097-01-C

[Issuance Date]

[Expiration Date]

The following requirements for the submittal of annual fees are established pursuant to Hawaii Administrative Rules (HAR), Title 11, Chapter 60.1, Air Pollution Control. Should HAR, Chapter 60.1 be revised such that the following requirements are in conflict with the provisions of HAR, Chapter 60.1, the permittee shall comply with the provisions of HAR, Chapter 60.1:

1. Annual fees shall be paid in full:
  - a. Within **sixty (60) days** after the end of each calendar year; and
  - b. Within **thirty (30) days** after the permanent discontinuance of the covered source.
2. The annual fees shall be determined and submitted in accordance with Hawaii Administrative Rules, Chapter 11-60.1, Subchapter 6.
3. The annual emissions data for which the annual fees are based shall accompany the submittal of any annual fees and submitted on forms furnished by the Department of Health.
4. The annual fees and the emission data shall be mailed to:

**Clean Air Branch  
Environmental Management Division  
Hawaii Department of Health  
P. O. Box 3378  
Honolulu, HI 96801-3378**

## PROPOSED

### ATTACHMENT IV: ANNUAL EMISSIONS REPORTING REQUIREMENTS COVERED SOURCE PERMIT NO. 0097-01-C

[Issuance Date]

[Expiration Date]

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions.

1. Complete the attached forms:

Annual Emissions Report Form: Gas Turbines  
Annual Emissions Report Form: Diesel Engines  
Annual Emissions Report Form: Boiler

2. The reporting period shall be from January 1 to December 31 of each year. All reports shall be submitted to the Department of Health within **sixty (60) days** after the end of each calendar year and shall be mailed to the following address:

**Clean Air Branch  
Environmental Management Division  
Hawaii Department of Health  
P. O. Box 3378  
Honolulu, HI 96801-3378**

3. The permittee shall retain the information submitted, including all emission calculations. These records shall be in a permanent form suitable for inspection, retained for a minimum of five (5) years, and made available to the Department of Health upon request.
4. Any information submitted to the Department of Health without a request for confidentiality shall be considered public record.
5. In accordance with HAR, Section 11-60.1-14, the permittee may request confidential treatment of specific information including information concerning secret processes or methods of manufacturing, by submitting a written request to the Director and clearly identifying the specific information that is to be accorded confidential treatment.

COMPLIANCE CERTIFICATION FORM  
COVERED SOURCE PERMIT NO. 0097-01-C  
(PAGE 1 OF 2)

[Issuance Date]

[Expiration Date]

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following certification at least annually, or more frequently as set by an applicable requirement:

(Make Copies for Future Use)

For Period: \_\_\_\_\_ Date: \_\_\_\_\_

Facility Name: \_\_\_\_\_

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record. I further state that I will assume responsibility for the construction, modification, or operation of the source in accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, and any permit issued thereof.

Responsible Official (Print): \_\_\_\_\_

TITLE: \_\_\_\_\_

Responsible Official (Signature): \_\_\_\_\_

Complete the following information for **each** term or condition of the permit that applies to **each** emissions unit at the source. Also include any additional information as required by the director. The compliance certification may reference information contained in a previous compliance certification submittal to the director, provided such referenced information is certified as being current and still applicable.

1. Current permit number: \_\_\_\_\_

2. Emissions Unit No./Description: \_\_\_\_\_

3. Identify the permit term(s) or condition(s) that is/are the basis of this certification:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. Compliance status during the reporting period:

a. Has the emissions unit been in compliance with the identified permit term(s) or condition(s)?

☐ YES

☐ NO

b. If YES, was compliance continuous or intermittent?

☐ Continuous

☐ Intermittent

**COMPLIANCE CERTIFICATION FORM  
COVERED SOURCE PERMIT NO. 0097-01-C  
(CONTINUED, PAGE 2 OF 2)**

c. If NO, explain.

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5. The methods used for determining the compliance status of the emissions unit currently and over the reporting period (e.g., monitoring, recordkeeping, reporting, test methods, etc.):

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Provide a detailed description of the methods used to determine compliance: (e.g., monitoring device type and location, test method description, or parameter being recorded, frequency of recordkeeping, etc.)

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6. Statement of Compliance with Enhanced Monitoring and Compliance Certification Requirements.

a. Is the emissions unit identified in this application in compliance with applicable enhanced monitoring and compliance certification requirements?

☐ YES

☐ NO

b. If YES, identify those requirements:

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c. If NO, describe below which requirements are not being met:

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## PROPOSED

**ANNUAL EMISSIONS REPORT FORM  
GAS TURBINES  
COVERED SOURCE PERMIT NO. 0097-01-C**

**[Issuance Date]**

**[Expiration Date]**

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions.

*Fill out a separate form for each Gas Turbine.*

(Make Copies for Future Use)

For Period: \_\_\_\_\_ Date: \_\_\_\_\_

Facility Name: \_\_\_\_\_

Equipment Location: \_\_\_\_\_

Equipment Description: \_\_\_\_\_

Serial/ID No.: \_\_\_\_\_

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.

Responsible Official (Print): \_\_\_\_\_

Title: \_\_\_\_\_

Responsible Official (Signature): \_\_\_\_\_

\_\_\_\_\_ MMBtu/Hr. (Maximum Design Heat Input; MM =  $1 \times 10^6$ )

\_\_\_\_\_ kilowatt rating

\_\_\_\_\_ horse-power rating

Type of Fuel Fired	Fuel Usage Gallons per year	% Sulfur Content by Weight

Types of Fuel: 

- Fuel Oil No. 2
- Biodiesel
- Naphtha

## PROPOSED

**ANNUAL EMISSIONS REPORT FORM  
DIESEL ENGINES  
COVERED SOURCE PERMIT NO. 0097-01-C**

**[Issuance Date]**

**[Expiration Date]**

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions.

*Fill out a separate form for each Diesel Engine.*

(Make Copies for Future Use)

For Period: \_\_\_\_\_ Date: \_\_\_\_\_

Facility Name: \_\_\_\_\_

Equipment Location: \_\_\_\_\_

Equipment Description: \_\_\_\_\_

Serial/ID No.: \_\_\_\_\_

**I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.**

Responsible Official (Print): \_\_\_\_\_

Title: \_\_\_\_\_

Responsible Official (Signature): \_\_\_\_\_

\_\_\_\_\_ MMBtu/Hr. (Maximum Design Heat Input; MM =  $1 \times 10^6$ )

\_\_\_\_\_ kilowatt rating

\_\_\_\_\_ horse-power rating

Type of Fuel Fired	Fuel Usage Gallons per year	% Sulfur Content by Weight

Types of Fuel: 

- Fuel Oil No. 2
- Biodiesel

**PROPOSED**

**ANNUAL EMISSIONS REPORT FORM  
BOILER  
COVERED SOURCE PERMIT NO. 0097-01-C**

**[Issuance Date]**

**[Expiration Date]**

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the nature and amounts of emissions.

(Make Copies for Future Use)

For Period: \_\_\_\_\_ Date: \_\_\_\_\_

Facility Name: \_\_\_\_\_

Equipment Location: \_\_\_\_\_

Equipment Description: \_\_\_\_\_

Serial/ID No.: \_\_\_\_\_

I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.

Responsible Official (Print): \_\_\_\_\_

Title: \_\_\_\_\_

Responsible Official (Signature): \_\_\_\_\_

Classification of Boiler by Heat Input (Check one):

- \_\_\_\_\_ Utility:  $> 106 \times 10^9$  J/hr. ( $> 100 \times 10^6$  BTU/hr.)  
☐ *Tangentially-fired* ☐ *Vertical-fired* ☐ *Other*  
\_\_\_\_\_ Industrial:  $10.6 \times 10^9$  to  $106 \times 10^9$  J/hr. ( $10 \times 10^6$  to  $100 \times 10^6$  BTU/hr.)  
\_\_\_\_\_ Commercial:  $0.5 \times 10^9$  to  $10.6 \times 10^9$  J/hr. ( $0.5 \times 10^6$  to  $10 \times 10^6$  BTU/hr.)  
\_\_\_\_\_ Residential:  $< 0.5 \times 10^9$  J/hr. ( $< 0.5 \times 10^6$  BTU/hr.)

Type of Fuel Fired	Fuel Usage Gallons per year	% Sulfur Content by Weight

Types of Fuel: 

- Fuel Oil No. 2
- Biodiesel
- Specification Used Oil
- Transformer Specification Used Oil

**PROPOSED****MONITORING REPORT FORM  
FUEL CONSUMPTION  
COVERED SOURCE PERMIT NO. 0097-01-C****[Issuance Date]****[Expiration Date]**

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following information on a semi-annual basis:

(Make Copies for Future Use)

For Period: \_\_\_\_\_ Date: \_\_\_\_\_

Facility Name: \_\_\_\_\_

Equipment Location: \_\_\_\_\_

Equipment Description: \_\_\_\_\_

Equipment Capacity/Rating (specify units): \_\_\_\_\_  
(Units such as Horsepower, kilowatt, tons/hour, etc.)

Serial/ID No.: \_\_\_\_\_

Types of Fuel: \_\_\_\_\_ % Sulfur Content by Weight: \_\_\_\_\_

**I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.**

Responsible Official (Print): \_\_\_\_\_

Title: \_\_\_\_\_

Responsible Official (Signature): \_\_\_\_\_

MONTH	MONTHLY FUEL CONSUMPTION (GALLONS)	ROLLING 12-MONTH PERIOD - FUEL CONSUMPTION (GALLONS)	NOTES (Indicate exceedances, if any)
January			
February			
March			
April			
May			
June			
July			
August			
September			
October			
November			
December			

**PROPOSED**

**MONITORING REPORT FORM  
VISIBLE EMISSIONS  
COVERED SOURCE PERMIT NO. 0097-01-C**

**[Issuance Date]**

**[Expiration Date]**

In accordance with the Hawaii Administrative Rules, Title 11, Chapter 60.1, Air Pollution Control, the permittee shall report to the Department of Health the following information **semi-annually**:

(Make Copies for Future Use)

For Period: \_\_\_\_\_ Date: \_\_\_\_\_

Facility Name: \_\_\_\_\_

**I certify that I have knowledge of the facts herein set forth, that the same are true, accurate, and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.**

Responsible Official (Print): \_\_\_\_\_

Title: \_\_\_\_\_

Responsible Official (Signature):\_\_\_\_\_

**Visible Emissions:**

Report the following on the lines provided below: all date(s) and six (6) minute average opacity reading(s) which the opacity limit was exceeded during the monthly observations; or if there were no exceedances during the monthly observations, then write no exceedances in the comment column.

[illegible]

<b>VISIBLE EMISSIONS FORM REQUIREMENTS</b> <b>STATE OF HAWAII</b> <b>COVERED SOURCE PERMIT NO. 0097-01-C</b>	
<b>[Issuance Date]</b>	<b>[Expiration Date]</b>

The **Visible Emissions (V.E.) Form** shall be completed **monthly** (*each calendar month*) for each equipment subject to opacity limits in accordance with 40 CFR Part 60, Appendix A, Method 9 or use of a Ringelmann Chart as provided. At least **annually** (*calendar year*), V.E. observations shall be conducted for each equipment subject to opacity limits by a certified reader in accordance with Method 9. The V.E. Form shall be completed as follows:

1. Visible emissions observations shall take place during the day only and shall be compared to the Ringelmann Chart provided. The opacity shall be noted in five (5) percent increments (e.g., 25%).
2. Orient the sun within a 140 degree sector to your back. Provide a source layout sketch on the V.E. Form using the symbols as shown.
3. Stand at least three (3) stack heights, but not more than a quarter mile from the stack.
4. Two (2) consecutive six (6) minute observations shall be taken at fifteen (15) second intervals for each stack or emission point.
5. The six (6) minute average opacity reading shall be calculated for each observation.
6. If possible, the observations shall be performed as follows:
  - a. Read from where the line of sight is at right angles to the wind direction.
  - b. The line of sight shall not include more than one (1) plume at a time.
  - c. Read at the point in the plume with the greatest opacity (without condensed water vapor), ideally while the plume is no wider than the stack diameter.
  - d. Read the plume at fifteen (15) second intervals only. Do not read continuously.
  - e. The equipment shall be operating at maximum permitted capacity.
7. If the equipment was shut-down for that period, briefly explain the reason for shut-down in the comment column.

The permittee shall retain the completed V.E. Forms for recordkeeping. These records shall be in a permanent form suitable for inspection, retained for a minimum of five years, and made available to the Department of Health, or their representative upon request.

Any required initial and annual performance test performed in accordance with Method 9 by a certified reader shall satisfy the respective equipment's V.E. monitoring requirements for the month the performance test is performed.

**VISIBLE EMISSIONS FORM  
STATE OF HAWAII  
COVERED SOURCE PERMIT NO. 0097-01-C**

**[Issuance Date]**

**[Expiration Date]**

(Make Copies for Future Use for Each Stack or Emission Point)

Permit No.: \_\_\_\_\_

Company Name: \_\_\_\_\_

Equipment and Fuel: \_\_\_\_\_

**Site Conditions:**

Stack height above ground (ft): \_\_\_\_\_

Stack distance from observer (ft): \_\_\_\_\_

Emission color (black or white): \_\_\_\_\_

Sky conditions (% cloud cover): \_\_\_\_\_



Wind speed (mph): \_\_\_\_\_

Temperature (°F): \_\_\_\_\_

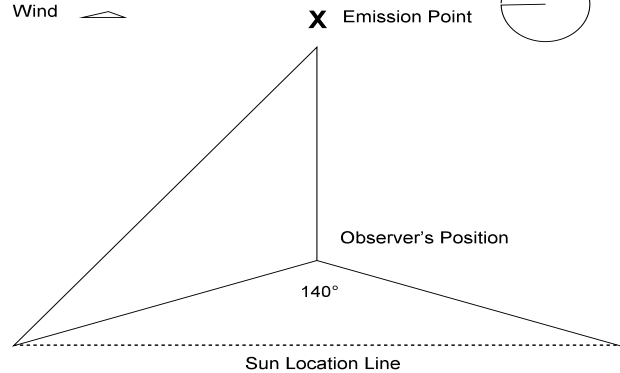
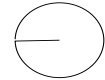
Observer Name: \_\_\_\_\_

Certified? (Yes/No): \_\_\_\_\_

Observation Date and Start Time: \_\_\_\_\_

Stack **X**  
Sun   
Wind 

Draw North Arrow



SECONDS	0	15	30	45	COMMENTS
MINUTES					
1					
2					
3					
4					
5					
6					
Six (6) Minute Average Opacity Reading (%):					

Observation Date and Start Time: \_\_\_\_\_

SECONDS	0	15	30	45	COMMENTS
MINUTES					
1					
2					
3					
4					
5					
6					
Six (6) Minute Average Opacity Reading (%):					

EXCESS EMISSIONS AND MONITORING SYSTEM PERFORMANCE  
SUMMARY REPORT

(PAGE 1 OF 2)

(Make Copies for Future Use)

Facility Name: \_\_\_\_\_

Equipment Location: \_\_\_\_\_

Equipment Description: \_\_\_\_\_

Covered Source Permit No.: \_\_\_\_\_ Condition No.: \_\_\_\_\_

PSD Permit No.: \_\_\_\_\_ Condition No.: \_\_\_\_\_

Code of Federal Regulations (CFR): \_\_\_\_\_

**Pollutant Monitored:** \_\_\_\_\_

From: Date \_\_\_\_\_ - Time \_\_\_\_\_

To: Date \_\_\_\_\_ - Time \_\_\_\_\_

Emission Limit: \_\_\_\_\_

Date of Last CEMS Certification/Audit . . . . . \_\_\_\_\_

**Total Source Operating Time** . . . . . \_\_\_\_\_

EMISSION DATA SUMMARY

1. Duration (Hours/Periods) of Excess Emissions in Reporting Period due to:
  - a. Start-Up/Shutdown . . . . . \_\_\_\_\_
  - b. Cleaning/Soot Blowing . . . . . \_\_\_\_\_
  - c. Control Equipment Failure . . . . . \_\_\_\_\_
  - d. Process Problems . . . . . \_\_\_\_\_
  - e. Other Known Causes . . . . . \_\_\_\_\_
  - f. Unknown Causes . . . . . \_\_\_\_\_
  - g. Fuel Problems . . . . . \_\_\_\_\_
- Number of incidents of excess emissions . . . . . \_\_\_\_\_
2. Total Duration of Excess Emissions . . . . . \_\_\_\_\_
3. Total Duration of Excess Emissions  
(% of Total Source Operating Time) . . . . . \_\_\_\_\_

CEMS PERFORMANCE SUMMARY

1. CEMS Downtime (Hours/Periods) in Reporting Period Due to:
  - a. Monitor Equipment Malfunctions . . . . . \_\_\_\_\_
  - b. Non-Monitor Equipment Malfunctions . . . . . \_\_\_\_\_
  - c. Quality Assurance Calibration . . . . . \_\_\_\_\_
  - d. Other Known Causes . . . . . \_\_\_\_\_
  - e. Unknown Causes . . . . . \_\_\_\_\_
- Number of incidents of monitor downtime. . . . . \_\_\_\_\_
2. Total CEMS Downtime . . . . . \_\_\_\_\_
3. Total CEMS Downtime  
(% of Total Source Operating Time) . . . . . \_\_\_\_\_

**EXCESS EMISSIONS AND MONITORING SYSTEM PERFORMANCE  
SUMMARY REPORT**

**(CONTINUED, PAGE 2 OF 2)**

**CERTIFICATION by Responsible Official**

**I certify that I have knowledge of the facts herein set forth, that the same are true, accurate and complete to the best of my knowledge and belief, and that all information not identified by me as confidential in nature shall be treated by the Department of Health as public record.**

Responsible Official (Print): \_\_\_\_\_

Title: \_\_\_\_\_

Responsible Official (Signature):\_\_\_\_\_